

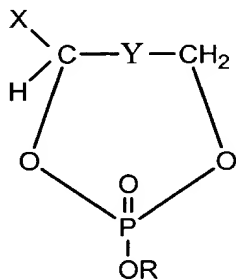
Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

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21  
1. (currently amended) A method for inducing promotion of neural cell differentiation of target cells comprising contacting said target cells for a suitable period of time with an effective amount of a compound of the general Formula I



wherein

Y is  $-(CH_2)_m-$ ,  $-CH(OH)-$  or  $-C(=O)-$  and m is  $[[0-3]]$  1-3;

X is H, alkyl,  $-CH_2OH-$ ,  $CH_2Oacyl$  or  $-CH_2acyl$ ; and

R is H, a cation, alkyl or optionally substituted aryl;

~~provided that when Y is  $-(CH_2)_m-$ ,  $m=0$ , and R is H or cation, X is not  $CH_2Oacyl$ .~~

2. (original) A method for promoting neural activity in an individual comprising administering to the

individual in need an effective amount of a compound of the general Formula I of Claim 1.

*3. (previously presented)* A method according to Claim 2, wherein said neural activity is selected from the group consisting of promotion of neuronal outgrowth, promotion of nerve growth, provision of dopaminotrophic supporting environment in a diseased portion of the brain and nerve rescue.

4. (previously presented) A method for the treatment of disorders and diseases which can be treated by promoting neural cell differentiation and/or neural activity comprising administering to a person in need a therapeutically effective amount of a compound of Formula I of Claim 1.

5. (previously presented) A method according to Claim 4, wherein said disorders and diseases are mental disorders or diseases which are at least one of dementia mental disorders and neuro-degenerative disorders or diseases.

6. (currently amended) A method according to Claim 4, wherein said mental disorder or disease is schizophrenia-~~or~~ dementia.

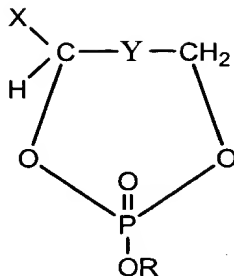
7. (original) A method according to Claim 4,  
wherein said disorders and diseases are neurodegenerative  
disorders or diseases.

*(D) only*  
8. (currently amended) A method according to claim  
1 wherein the compound of formula I is selected from the group  
consisting of

- i. 1,3 cyclic glycerophosphate;
- ~~ii. 1,2 cyclic glycerophosphate;~~
- ~~iii. phenyl 1,3 cyclic glycerophosphate;~~
- ~~iv. phenyl 1,2 cyclic glycerophosphate;~~
- ~~v. 1,3 cyclic propanediol phosphate;~~
- ~~vi. 1,2 cyclic propanediol phosphate;~~
- ~~vii. phenyl 1,3 cyclic propanediol phosphate;~~
- ~~viii. phenyl 1,2 cyclic propanediol phosphate;~~
- ~~ix. cyclic dihydroxyacetone phosphate; and~~
- ~~x. phenyl cyclic dihydroxyacetone phosphate.~~

9-16. (canceled)

17. (currently amended) A method for promoting  
neural activity in an individual comprising administering to  
the individual in need an effective amount of a compound of  
the general formula I



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Carter  
wherein

Y is  $-(CH_2)_m-$ ,  $-CH(OH)-$  or  $-C(=O)-$  and m is [[0-3;]]1-3;

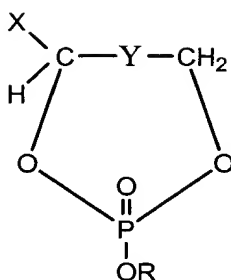
X is H, alkyl,  $-CH_2OH-$ ,  $CH_2Oacyl$  or  $-CH_2acyl$ ; and

R is H, a cation, alkyl or optionally substituted aryl;

~~provided that when Y is  $-(CH_2)_m$ ,  $m=0$ , and R is H or cation, X~~  
~~is not  $CH_2Oacyl$ ;~~

wherein said neuronal activity is selected from the group  
consisting of promotion of neuronal outgrowth, promotion of  
nerve growth, provision of dopaminotrophic supporting  
environment in a diseased portion of the brain and nerve  
rescue.

18. (currently amended) A method for the treatment  
of disorders and diseases, other than dementia, which can be  
treated by promoting neural cell differentiation and/or neural  
activity, the method comprising administering to a person in  
need a therapeutically effective amount of a compound of  
Formula I



wherein

Y is  $-(CH_2)_m-$ ,  $-CH(OH)-$  or  $-C(=O)-$ , and m is [[0-3]] 1-3;

X is H, alkyl,  $-CH_2OH-$ ,  $CH_2Oacyl$  or  $-CH_2acyl$ ; and

R is H, a cation, alkyl or optionally substituted aryl;


~~provided that when Y is  $-(CH_2)_m-$ ,  $m=0$ , and R is H or cation, X~~  
~~is not  $CH_2Oacyl$ .~~

19. (original) A method according to claim 18,  
wherein said disorders and diseases are mental disorders or  
diseases.

20. (previously presented) A method according to  
claim 18 , wherein said mental disorder or disease is  
schizophrenia.

21. (previously presented) A method according to  
Claim 18 , wherein said mental disorder is a learning  
disability.

22. (original) A method according to claim 18, wherein said disorders and diseases are neurodegenerative disorders or diseases.

 23. (previously presented) A method according to Claim 18, wherein said neurodegenerative disorder or disease is Alzheimer's disease or Parkinson's disease.

24. (previously presented) A method according to Claim 18, wherein said disorders or diseases result from exposure of an individual to harmful environmental factors or from a mechanical injury.

25. (previously presented) A method according to Claim 18, for the treatment of nerve rescue after nerve injury.

26. (currently amended) A method according to claim 18 where the general formula I is selected from the group consisting of

- i. 1,3 cyclic glycerophosphate;
- ~~ii. 1,2 cyclic glycerophosphate;~~
- iii. phenyl 1,3 cyclic glycerophosphate-P;
- ~~iv. phenyl 1,2 cyclic glycerophosphate;~~
- v. 1,3 cyclic propanediol phosphate;
- ~~vi. 1,2 cyclic propanediol phosphate;~~

- Q/*  
*only*
- ~~viii~~iv. phenyl 1,3 cyclic propanediol phosphate;
  - ~~viii~~. ~~phenyl 1,2 cyclic propanediol phosphate;~~
  - ~~ix~~v. cyclic dihydroxyacetone phosphate; and
  - ~~x~~vi. phenyl cyclic dihydroxyacetone phosphate.

27-36. (canceled)

37 (new): A method according to claim 4, wherein  
said mental disorder or disease is dementia.

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